

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-10 and 12-28 are all the claims pending in the application. Applicant submits the pending claims define patentable subject matter.

Claim Rejections - 35 USC § 103

Claims 1-5, 14, 16, 22 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCutchan et al. (US 5,864,478; hereinafter "McCutchan") in view of Handforth et al. (US 6,061,241; hereinafter "Handforth"). Applicant respectfully traverses this rejection.

Independent claim 1 recites, in part:

a power block;
an inverter block;
a mainboard on which the power block is arranged; and
a sub-board on which the inverter block is arranged,
wherein the sub-board is mounted on the mainboard.

The Examiner admits McCutchan fails to disclose or suggest the claimed inverter block. However, the Examiner continues to maintain Handforth discloses an inverter module in element 200 shown in FIG. 1 of Handforth. Further, in response to our arguments submitted in the Amendment filed March 14, 2007, the Examiner states:

Handforth that teaches a module (200) including a FET (24), so the module (200) having a function at least in FET element (24) do/does invert current that applied into the module (200) to be invert signal or data from the module (200) to the board.

Applicant respectfully disagrees with the Examiner's position.

In particular, regarding the FET 24, Handforth specifically states:

A further integrated circuit known as a Field Effect Transistor (FET) 24 and which is used in implementing current limiting functionality in the line card circuitry of U.S. Pat. No. 5,333,192, is shown through hole mounted and physically removed from the ASIC 22.¹

Thus, the FET is used for current limiting functionality, which is entirely different from the claimed inverter block. That is, Applicant submits one of skill in the art would understand the claimed “inverter” as corresponding to a specific type of circuit element, which does not necessarily correspond to the current-limiting FET 24 disclosed in Handforth.

Furthermore, as noted above, the Examiner alleges the FET element 24 in Handforth does invert current applied into the module 200 to invert the signal. However, the Examiner again has not provided any specific support for this conclusory statement. Instead, Handforth fails to mention anything with regard to an inverter, or an inverting function or inverting any type of signal whatsoever. In fact, Handforth is completely silent as to such a feature. Thus, Applicant submits the cited references, either alone or in combination, fail to teach or suggest all of the claimed features.

The Examiner also contends:

[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Handforth et al. employed in the module of McCutchan et al. in order to achieve high productivity and functions operated in the circuit board.

Applicant respectfully submits the Examiner’s position is improper.

Specifically, neither McCutchan nor Handforth discuss achieving “high productivity and functions operated in the circuit board” as the Examiner contends. McCutchan describes a “need

¹ See Handforth, col. 4, lines 27-32.

for an improved arrangement for delivering power to a power consuming module requiring high amounts of power at a lower voltage.”² Similarly, Handforth describes:

[v]arious innovative techniques are disclosed which significantly reduce compromising component thermal interactions. Heat concerns from using a small thermally conductive substrate have been managed through advantageous use of printed battery feed resistor layouts which provide for larger portions of heat to be dissipated in resistor portions removed from a heat sensitive integrated circuit than resistor portions adjacent to the heat sensitive integrated circuit. Advantageous placement of feed resistor trim links to further manage heat dissipation are also disclosed.³

Thus, neither reference discusses the motivation suggested by the Examiner.

In view of the above, Applicant submits independent claim 1 is patentable at least for the reasons stated above. Similarly, Applicant submits independent claim 16 is patentable for analogous reasons. Further, Applicant submits dependent claims 2-5, 14, 22 and 24-28 are patentable, at least by virtue of their respective dependency on claims 1 and 16.

Additionally, regarding claim 22, the claim recites, in part:

wherein the inverter block receives a direct current from the power block to generate an alternating current.

Thus, claim 22 requires, *inter alia*, the inverter block generate an alternating current. Claim 24 recites similar features.

Regarding claims 22 and 24, the Examiner asserts:

McCutchan as modified by Handforth shows the inverter block (200) (the block includes a FET 24) capable of being function to invert DC to AC.

² See McCutchan, col. 1, lines 55-60.

³ See Handforth, Abstract.

However, Applicant submits the Examiner's assertion is completely unsubstantiated by the references.

Specifically, neither reference, either alone or in combination, mentions anything whatsoever related to AC or alternating current. Consequently, Applicant submits the cited art fails to disclose all of the required features of the claimed invention. Therefore, in addition to the reasons stated above, Applicant submits claim 22 is patentable over the prior art of record for these reasons, and claim 24 is patentable over the applied art for analogous reasons.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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